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### **Summary Key Points**

- According to the most recent <u>FluView</u> report, influenza activity remains low in the United States overall.
- So far, influenza A(H3N2) viruses have been most common this season.
- Flu is difficult to predict. It's not possible to say when the 2017-2018 flu season will begin in the United States, how severe it will be or what viruses will predominate.
- <u>Each flu season</u>, flu causes millions of illnesses, hundreds of thousands of hospitalizations and thousands or sometimes tens of thousands of deaths.
- The Centers for Disease Control and Prevention (CDC) recommends annual flu vaccination for everyone 6 months and older by the end of October, if possible.
- CDC recommends injectable influenza vaccine this season (flu shots).
- There is no preferential recommendation for one flu shot over another.
- It takes about two weeks after vaccination for protection to set in.
- Now is a good time to get vaccinated.
- There are many reasons to get a flu vaccine.
  - 1. While flu vaccine can vary in how well it works, it is the best way to prevent flu illness and serious flu complications, including those that can result in hospitalization.
  - 2. Even with vaccine effectiveness in the range of 30 to 60 percent, flu vaccination prevents millions of illnesses and tens of thousands of flu-related hospitalizations each year.
  - 3. We cannot know which viruses will circulate over the season and which virus will predominate. Flu vaccine protects against three or four different flu viruses, depending on which vaccine you get.
  - 4. A 2017 study was the first of its kind to show that flu vaccination can significantly reduce a child's risk of dying from influenza.
  - 5. Getting vaccinated yourself protects people around you, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions.

- 6. While flu vaccine is not perfect and some people who get vaccinated may still get flu, there is some data to suggest that flu vaccination may make illness milder.
- Manufacturers report having shipped more than 130.2 million doses of flu vaccine as of October 20, 2017.
- The total projected supply of vaccine in the United States this season is between 151 million and 166 million doses of flu vaccine. About 119 million doses will be quadrivalent vaccine.
- Go to <a href="https://vaccinefinder.org">https://vaccinefinder.org</a> or <a href="www.cdc.gov/flu">www.cdc.gov/flu</a> to find a location near you where you can get vaccinated.

### **Flu Activity**

According to this week's FluView report, seasonal influenza activity remains low overall in the United States. However, 4 states and Guam reported regional flu activity and 12 states and Puerto Rico reported local influenza activity. Flu vaccine is the best available way to protect against influenza. CDC recommends that everyone 6 months and older get an injectable flu vaccine as soon as possible. Below is a summary of the key flu indicators for the week ending October 28, 2017:

- **Influenza-like Illness Surveillance:** For the week ending October 28, the proportion of people seeing their <u>health care provider</u> for influenza-like illness (ILI) was 1.5% which is below the national baseline of 2.2%. All 10 regions reported a proportion of outpatient visits for ILI below their region-specific baseline levels.
  - Additional ILINet data, including national, regional, and select state-level data for the current and previous seasons, can be found at <a href="http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html">http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html</a>.
- Influenza-like Illness State Activity Indicator Map: One state experienced
  moderate ILI activity (Wyoming). Four states (Georgia, Louisiana, South Carolina,
  and South Dakota) experienced low ILI activity. New York City and 45 states
  experienced minimal ILI activity. Data were insufficient to calculate an ILI activity
  level from the District of Columbia and Puerto Rico.
  - Additional data, including data for previous seasons, can be found at <a href="https://gis.cdc.gov/grasp/fluview/main.html">https://gis.cdc.gov/grasp/fluview/main.html</a>
- **Geographic Spread of Influenza Viruses:** Regional influenza activity was reported by Guam and four states (Georgia, Louisiana, Oklahoma, and Texas). Local influenza activity was reported by Puerto Rico and 12 states (Alaska, Arizona, California, Connecticut, Kentucky, Maine, Massachusetts, Mississippi, New Mexico, Ohio, South Carolina, and Tennessee). Sporadic activity was reported by the

District of Columbia and 31 states (Alabama, Arkansas, Colorado, Delaware, Florida, Hawaii, Idaho, Indiana, Illinois, Iowa, Kansas, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New York, North Carolina, North Dakota, Oregon, Pennsylvania, South Dakota, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming). No activity was reported by one state (Rhode Island). The U.S. Virgin Islands and two states (New Hampshire and West Virginia) did not report. Geographic spread data show how many areas within a state or territory are seeing flu activity.

- Additional data are available at: https://gis.cdc.gov/grasp/fluview/FluView8.html.
- **Flu-Associated Hospitalizations:** Reporting of influenza-associated hospitalization data from the Influenza Hospitalization Surveillance Network (FluSurv-NET) for the 2017-2018 influenza season will begin later this season.
  - Additional data, including hospitalization rates during other influenza seasons, can be found at <a href="http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html">http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html</a> and http://gis.cdc.gov/grasp/fluview/FluHospChars.html.

#### Mortality Surveillance:

- The <u>proportion of deaths</u> attributed to pneumonia and influenza (P&I) was 5.6% for the week ending October 14, 2017 (week 41). This percentage is below the epidemic threshold of 6.2% for week 41 in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- Region and state-specific data are available at https://gis.cdc.gov/grasp/fluview/mortality.html.

#### Pediatric Deaths:

- One influenza-associated pediatric death that occurred during the 2016-2017 flu season was reported to CDC during the week ending October 28, 2017 (week 43).
  - This death was associated with an influenza A (H3) virus and occurred during week 7 (the week ending February 18, 2017). This death brings the total number of reported influenza-associated pediatric deaths occurring during 2016-2017 season to 109.
- One influenza-associated pediatric death for the 2017-2018 season has been reported to CDC.
- Additional information on pediatric deaths is available on FluView Interactive at: https://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html.

#### Laboratory Data:

 Nationally, the percentage of <u>respiratory specimens</u> testing positive for influenza viruses in clinical laboratories during the week ending October 28 was 2.9%.

- Regionally, the three week average percent of specimens testing positive for influenza in clinical laboratories ranged from 0.4% to 5.7%.
- During the week ending October 28, of the 336 (2.9%) influenza-positive tests reported to CDC by clinical laboratories, 228 (67.9%) were influenza A viruses and 108 (32.1%) were influenza B viruses.
- The most frequently identified influenza virus type reported by public health laboratories was influenza A virus.
- During the week ending October 28, 109 (91.6%) of the 119 influenza-positive tests reported to CDC by public health laboratories were influenza A viruses and 10 (8.4%) were influenza B viruses. Of the 102 influenza A viruses that were subtyped, 88 (86.3%) were H3N2 viruses and 14 (13.7%) were (H1N1)pdm09 viruses.
- The majority of the influenza viruses collected from the United States during May 21 through October 28, 2017 were characterized antigenically and genetically as being similar to the cell-grown reference viruses representing the 2017–18 Northern Hemisphere influenza vaccine viruses.
- None of the viruses tested from May 21-October 28, 2017 were found to be resistant to oseltamivir, zanamivir, or peramivir.
- Three human infections with novel influenza A viruses were reported by 3 states (Colorado [1], Nebraska [1], and Michigan [1]) during the week ending October 28. Two infections were with influenza A(H3N2) variant (H3N2v) viruses and one infection was with an influenza A(H1N2) variant (H1N2v) virus. No ongoing human-to-human transmission was identified.

<u>FluView (http://www.cdc.gov/flu/weekly/fluactivitysurv.htm)</u> is available – and past issues are <u>archived (http://www.cdc.gov/flu/weekly/pastreports.htm)</u> – on the CDC website.

Note: Delays in reporting may mean that data changes over time. The most up to date data for all weeks during the 2017-2018 season can be found on the current <a href="FluView(http://www.cdc.gov/flu/weekly/">FluView(http://www.cdc.gov/flu/weekly/</a>) and FluView Interactive (<a href="https://www.cdc.gov/flu/weekly/fluviewinteractive.htm">https://www.cdc.gov/flu/weekly/fluviewinteractive.htm</a>).

#### Flu-Related Pediatric Deaths

- This week CDC is reporting a pediatric death that occurred last season (2016-2017) during the week ending February 18, 2017. That brings the total number of flu pediatric deaths from last season, to 109.
- Last week, CDC reported the first influenza-associated pediatric death of the 2017-2018 season.
  - The death occurred during the week ending October 21, 2017 and was associated with an influenza (H1N1)pdm09 virus infection.

- Since 2004, when pediatric deaths associated with influenza infection became nationally notifiable, the number of deaths reported to CDC each year has ranged from 37 (2011-2012 season) to 171 deaths (2012-2013 season).
- Additional data about influenza-associated pediatric mortality can be found at: <a href="http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html">http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html</a>.
- Because of confidentiality issues, CDC does not discuss or give details on individuals.
- This death is a somber reminder of the danger flu poses to children.
- The single best way to protect against seasonal flu and its potentially severe consequences in children is to get a seasonal flu vaccine each year.
- Vaccination is important for children younger than 5 years. It is especially important
  for those younger than 2 years and children of any age with a long-term health
  condition like asthma, diabetes and heart disease and neurological and
  neurodevelopmental diseases. These children are at higher risk of serious flu
  complications if they get the flu.
- Yearly vaccination also is especially important for people in contact with high risk children in order to protect the child (or children) in their lives from the flu. In particular, children younger than 6 months are too young to be vaccinated themselves but are at high risk of flu complications if they get sick so the people around them should get vaccinated to protect the infant.
- Some children 6 months through 8 years of age require 2 doses of influenza vaccine.
   Children in this age group who are getting vaccinated for the first time will need two
   doses. Some children who have received influenza vaccine previously also will need
   two doses this season. A health care provider should be consulted to determine
   whether two doses are recommended for a child.
- Flu-related deaths in children younger than 18 years old should be reported through the Influenza-Associated Pediatric Mortality Surveillance System. The number of fluassociated deaths among children reported during the 2017-2018 flu season will be updated each week and can be found at <a href="https://www.cdc.gov/flu/weekly/">www.cdc.gov/flu/weekly/</a>.